DOOSAN

Optimal Solutions for the Future

DCM series



Double Column Machining Center

DCM series

DCM 2740/2750
DCM 2760/2780
DCM 3250/3260/3280
DCM 3780/37100

ver. KO 151124 SU

Basic information

Broad Range of Machining Capabilities

High-Precision Mold Machining Performance

Convenient Machining Functions

Machine Information

Standard/Optional Specifications

Machine Specifications

Customer Support



DCM series

The DCM series is a multi-purpose double column machining center for applications such as heavy duty machining of large parts and high precision dies and molds. Designed with the highest specifications in its class, the DCM series provides a broad range of machining capabilities and optional equipment, together with many convenient functions for the operator.



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Broad Range of Machining Capabilities

- The best specifications in its class – effective width between columns has been further extended by 200 mm(7.9 inch) for increased machining capacity.
- A variety of different ram spindle specifications and a wide range of auto-change attachments support many types of machining applications, from simultaneous 5 axis processing of dies/molds to heavy duty cutting.

High-Precision Mold Machining Performance

- Adoption of the DSQ I/II/III functions, X/Y/Z/W axes linear scale, or X/Y/Z axes ball screw shaft cooling as options enables the machining of high-accuracy molds and general parts.

Convenient Machining Functions

- The machining center provides a 5-face machining support system for very large and heavy workpieces, easy setup guidance, easy pattern cycles, work load counter control, intelligent machining control and process monitoring function.



High-Rigidity, High-Precision Structure, Multi-purpose Double Column Machining Center

Optimal Solutions

Wide Machining Specifications

The best specifications in its class –effective width between column has been further extended by 200 mm(7.9 inch) for increased machining capacity.

Diverse Ram Spindles

A variety of different ram spindle specifications and a wide range of auto-change attachments support many types of machining applications, from simultaneous 5 axis processing of dies/molds to heavy duty cutting.

Various Auto-Change Head Attachments

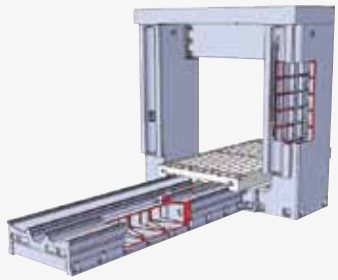
A diverse range of auto change head attachments enables a wide variety of applications to be processed, including machining of 5 faces ,angled faces using 1 degree index and simultaneous 5 axis cutting

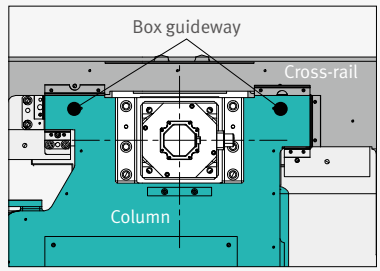
High-rigidity, High-precision Structure

Designed for large work pieces, the machine enables long-term, heavy-duty cutting with stable machining accuracy.

Bed and Column Structure

The structure of the DCM series minimizes the effects of vibration on workpieces under loads produced by both vertical and horizontal cutting during machining of 5 faces. Symmetrical structure design and the application of effective compensation reduces thermal displacement during machining.
The bed is made of an M-type cast structure excellent for vibration absorption to ensure a high level of machining accuracy.
The column provides extremely high rigidity thanks to its square-structured latticed-rib casting, which is excellent for vibration damping, and wide box guideways that are heat-treated and precision-ground.
The integrated column design provides a high degree of machining accuracy at all heights from the machine table, from heavy duty cutting to high precision finishing.

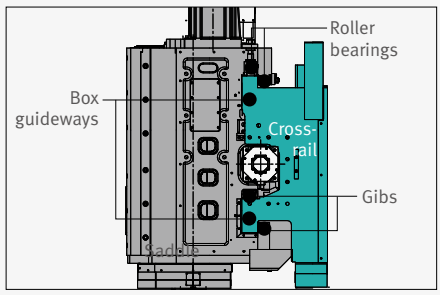


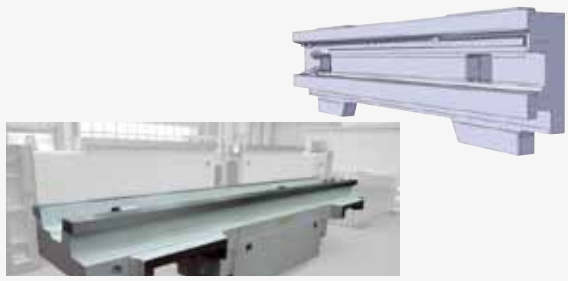




Cross-rail Structure

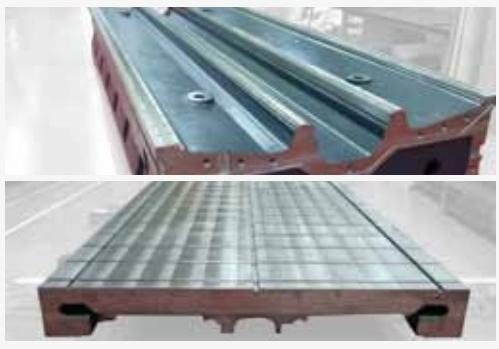
The guide-structure of the cross-rail supports the kinetic load of the saddle and ram spindle to maintain a high degree of accuracy for every type of work from heavy-duty cutting to finish cutting.
In addition, the hybrid-type structure combined with roller bearings and gibs enables smooth traveling.
The cast structure optimized for vibration damping, and the wide box guideway heat-treated and precision-ground are composed of highly rigid, square, sliding surfaces.

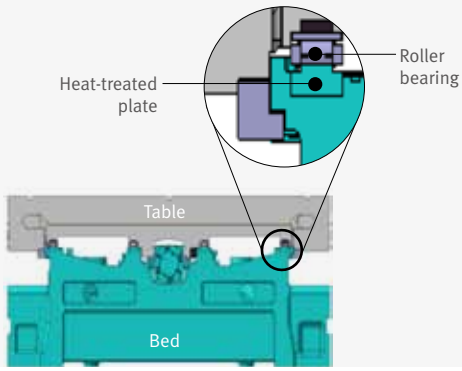




Bed and Table Structure

The bed supports traveling motion with four rows of heat-treated, precision-ground guideways.
A roller bearing pack for heavy-duty cutting and slide bearings for effective vibration damping are equipped at the bottom of the table to ensure a high level of cutting accuracy.





Wide Machining Specifications

The best specifications in its class – effective width between columns has been further extended by 200 mm(7.9 inch) for increased machining capacity.

X x Y x Z x W axes Travel

X-axis **4250 / 5250 / 6250 / 8250 / 10250 mm (167.3 / 206.7 / 246.1 / 324.8 / 403.5 inch)**

Y-axis **3200 / 3700 / 4200 mm (126.0 / 145.7 / 165.4 inch)**

Z-axis **700 mm (27.6 inch), 1000 mm (39.4 inch)** Option

W-axis **1100 mm (43.3 inch), 1400 mm (55.1 inch)** Option

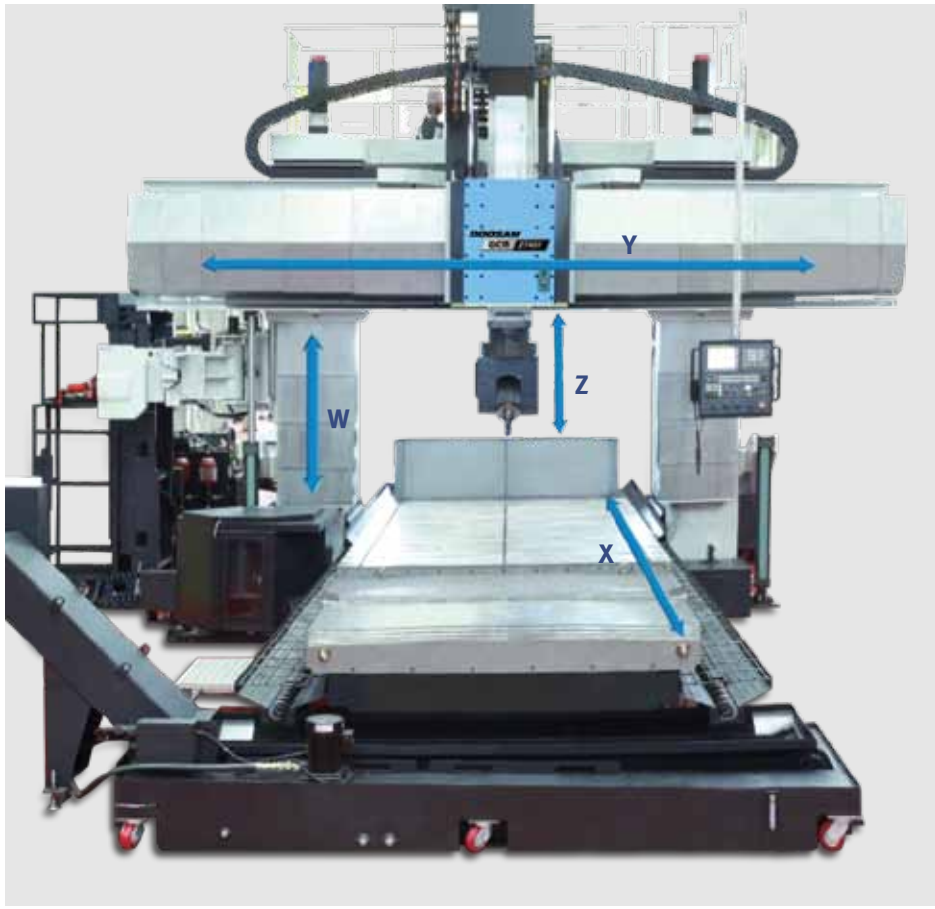


Table Load Capacity

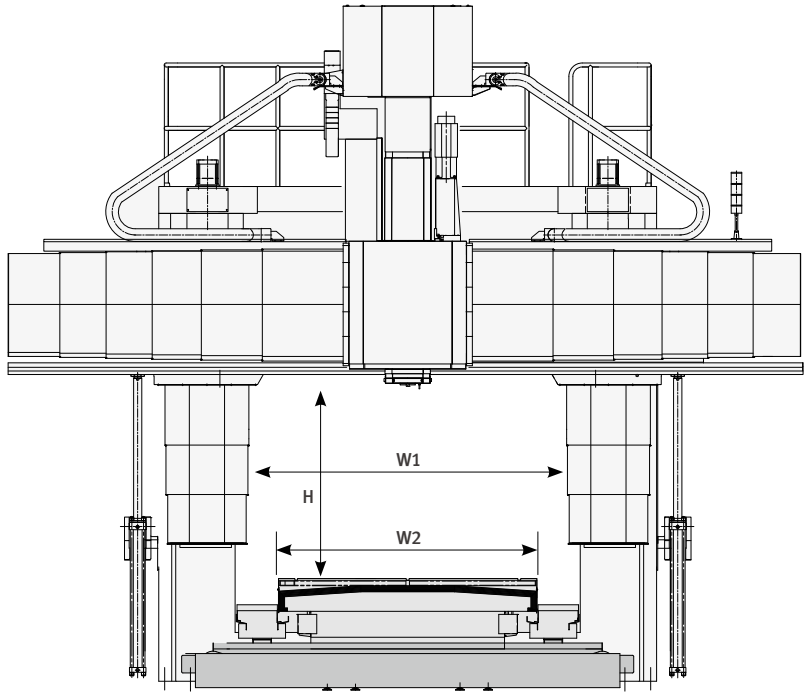
DCM 2740 **18000 kg (39682.6 lb)**
DCM 2750 **20000 kg (44091.8 lb)**
DCM 2760 **28000 kg (61728.5 lb)**
DCM 2780 **36000 kg (79365.2 lb)**
DCM 3250 **30000 kg (66137.7 lb)**
DCM 3260 **36000 kg (79365.2 lb)**
DCM 3280/3780/37100 **40000 kg (88183.6 lb)**

Rapid Traverse

X-axis	16 m/min(629.9 ipm)
Y-axis	16 m/min(629.9 ipm)
Z-axis	10 m/min(393.7 ipm)
W-axis	3 m/min(118.1 ipm)

Cutting Feedrate

X-axis	10000 mm/min(393.7 ipm)
Y-axis	10000 mm/min(393.7 ipm)
Z-axis	10000 mm/min(393.7 ipm)
W-axis	3000 mm/min(118.1 ipm) Option



Effective width between columns W1

2700 / 3200 / 3700 mm (106.3 / 126.0 / 145.7 inch)

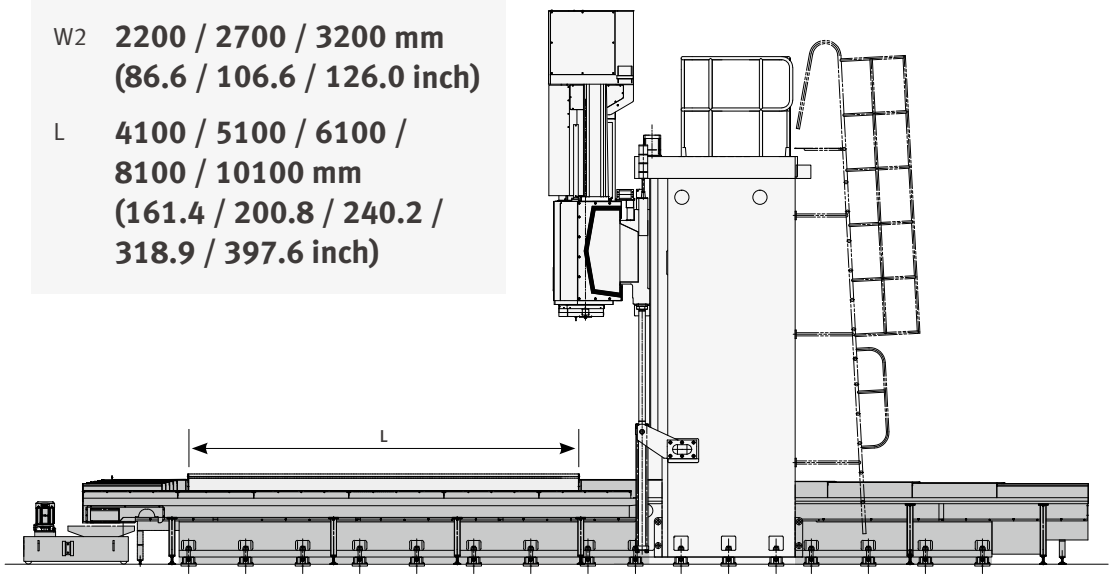
Workpiece height H

1650 mm (65.0 inch)
2000 / 2350 / 2700 mm Option
(78.7 / 92.5 / 106.3 inch)

Table size in Y and X axis W2 x L

W2 **2200 / 2700 / 3200 mm (86.6 / 106.6 / 126.0 inch)**

L **4100 / 5100 / 6100 / 8100 / 10100 mm (161.4 / 200.8 / 240.2 / 318.9 / 397.6 inch)**



Diverse Ram Spindles

A variety of different ram spindle specifications support a wide range of applications from heavy duty cutting to high speed / high precision mood machining.

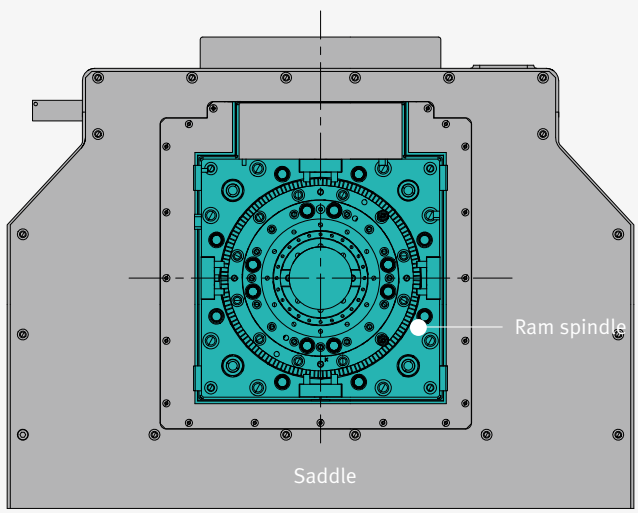
Adoption of ram spindle and saddle structure to support heavy-duty cutting

The highly rigid, square type box guideway ram has a cross section of 380 x 380mm(14.96 x 14.96 inch), which is the biggest in its class. This ensures optimum heavy duty machining capability in both vertical and horizontal applications.



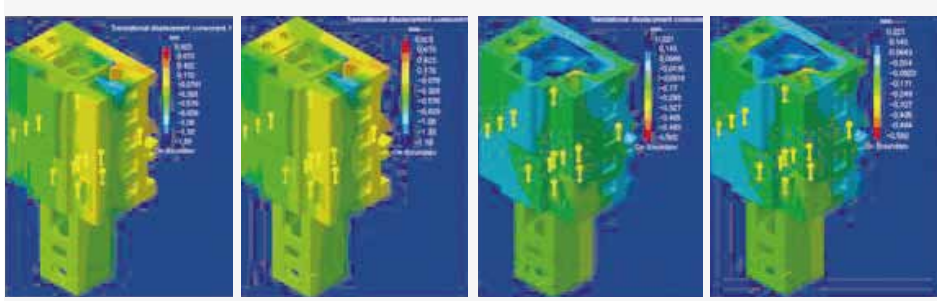






Stress analysis of ram spindle unit

The ram spindle unit is designed to maintain ideal conditions under any load through stress analysis.



X + direction | X + direction | Y + direction | Y + direction

Spindle Power – Torque Diagram

The 6000 r/min built-in driven ram spindle is equipped as a standard feature. Optionally, a 12000 r/min, built-in driven ram spindle can be selected when high-speed and high-power cutting capability are required. In addition, a ram spindle driven with a high-torque, 2-step gear shifting is also available as an optional feature for heavy-duty cutting.

Standard speed (built-in driven)

Spindle speed

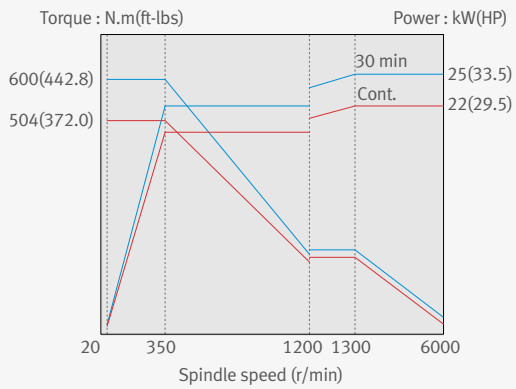
6000 r/min

Spindle power

25/22 kW(33.5 / 29.5 Hp)

Spindle torque

600 N.m(442.8 ft-lbs)



High speed Option (built-in driven)

Spindle speed

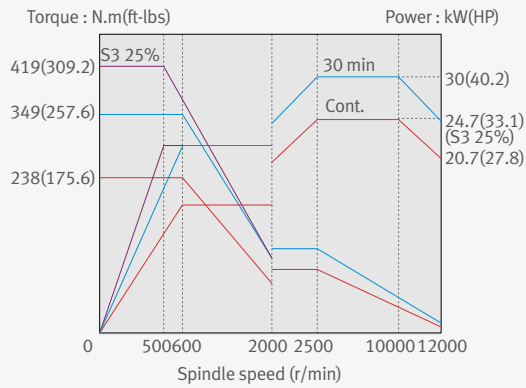
12000 r/min

Spindle power

30/25 kW (40.2 /33.5 Hp)

Spindle torque

419 N.m(309.2 ft-lbs)



Heavy-duty cutting I Option (gear driven)

Spindle speed

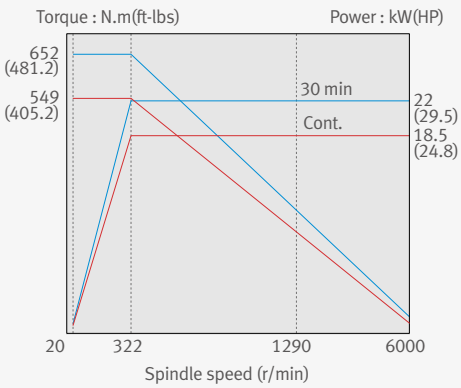
6000 r/min

Spindle power

22/18.5 kW
(29.5/24.8HP)

Spindle torque

652 N.m(481.2 ft-lbs)



Heavy-duty cutting II Option (gear driven)

Spindle speed

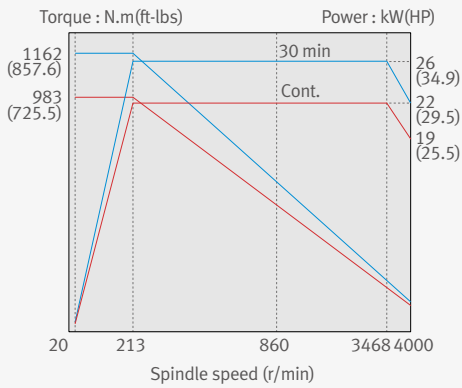
4000 r/min

Spindle power

26/22kW
(34.9/29.5HP)

Spindle torque

1162 N.m(857.6 ft-lbs)



Heavy-duty cutting III Option (gear driven)

Spindle speed

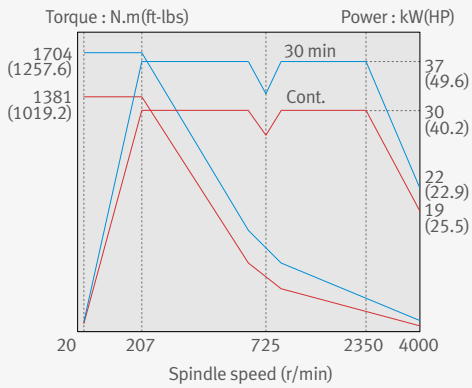
4000 r/min

Spindle power

37/30kW
(49.6/40.2HP)

Spindle torque

1704 N.m(1257.6 ft-lbs)



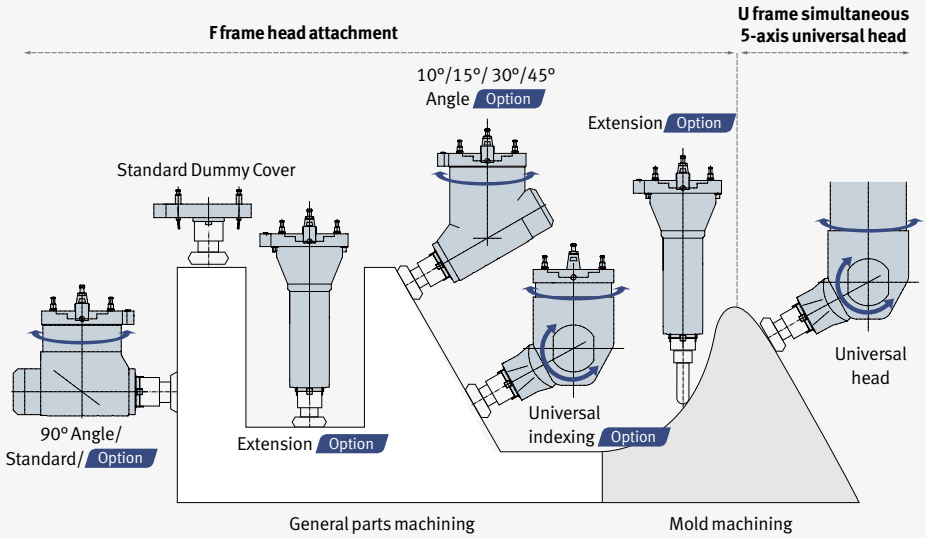
Various Auto-Change Head Attachments

Diverse head attachments for a wider range of machining applications





A diverse range of auto-change head attachments enables the machining of a variety of complex shapes, from 5 axis simultaneous processing of Molds to angled faces using 1 degree indexing, as well as 5 face machining. Head indexing is achieved by C axis control through the ram



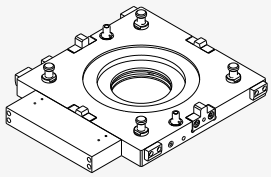
Various utilities are available to keep the same level of performance even when the head attachment is changed.
Provides numerous utilities to ensure the same performance provided by the original ram spindle even after changing a Head Attachment

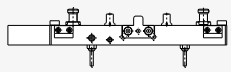
Features	Standard Dummy Cover	Extension Option	90° Angle (Standard/ Option)
Spindle Air Curtain	Standard	Standard	–
Flood Coolant / Air Blow	Standard	Standard	Standard
Head Attachment Tool Unclamp	Standard	Standard	Standard
Head Attachment Spindle Air Purge	Standard	Standard	Standard
TSC (Through Spindle Coolant)	Option	Option	Option
Spindle Cooling In	–	Standard	Option
Spindle Cooling Out	–	Standard	Option
Head Attachment Bearing Lubricant	–	Option	Option

※ The provided utility line could be different as choosing the head attachment.
※ When a universal head attachment, 10/15/30/45 degree angle attachment, or U-frame universal head is considered for purchase, please contact Doosan for detailed specifications.

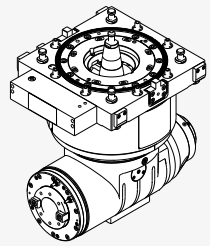
F Frame Head Attachment

Unit: mm (inch)



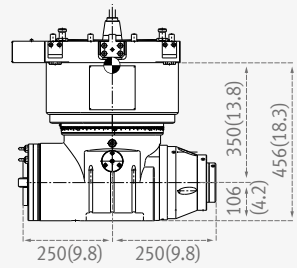


Standard Dummy Cover



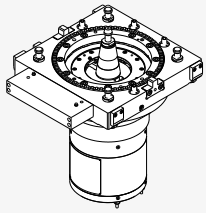
Standard 90° angle

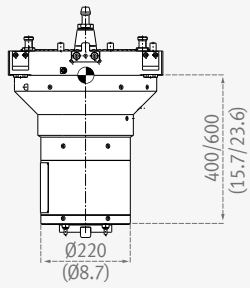
- 2000r/min, 22kW(29.5 Hp), min. 5/2.5/1° indexing



High speed 90° angle Option

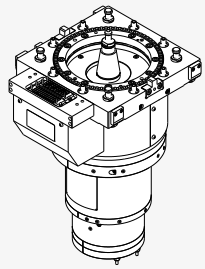
- 4000r/min, 22kW(29.5 Hp), min. 5/2.5/1° indexing
- 6000r/min, 22kW(29.5 Hp), min. 5/2.5/1° indexing

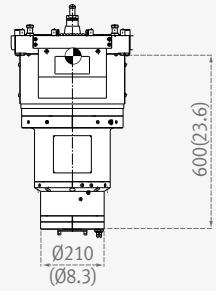




Extension Option

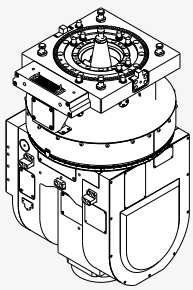
- 4000r/min, 22kW(29.5 Hp)
- 6000r/min, 22kW(29.5 Hp)

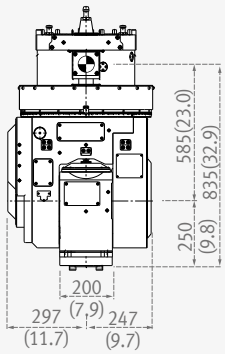




High-speed extension Option

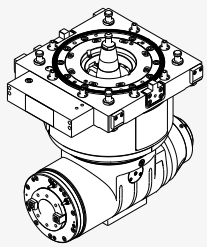
- 10000r/min, 15/11kW(14.8 Hp)
- 15000r/min, 15/11kW(14.8 Hp)

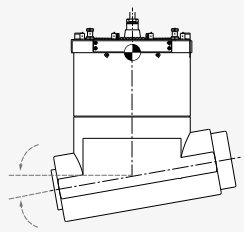




Universal indexing Option

- 2000r/min, 11kW(14.8 Hp), B/C axes min. 5° indexing
- 4000r/min, 11kW(14.8 Hp), B/C axes min. 1° indexing



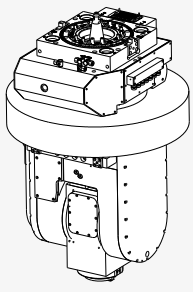


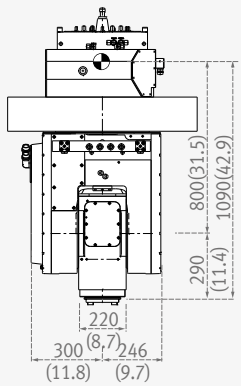
10°/15°/ 30°/45° angles Option

- 2000r/min, 11kW(14.8 Hp)

U Frame Simultaneous 5-Axis Universal Head

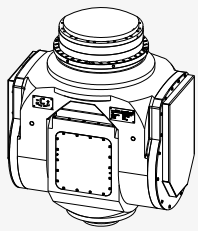
Unit: mm (inch)

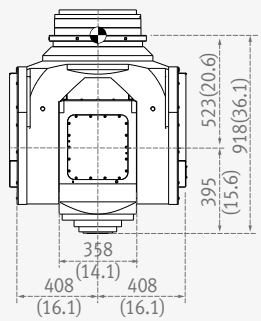




Heavy-duty cutting gear-driven universal head 3000r/min

- B axis ±110° min. 0.001° indexing
- C axis ±190° min. 0.001° indexing





High-speed, high-precision built-in driven universal head 12000r/min

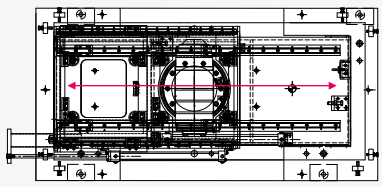
- B axis ±120° min. 0.001° indexing
- C axis ±220° min. 0.001° indexing

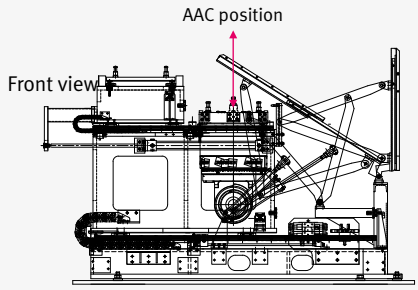
Automatic Head Attachment Changer (AAC)

Standard AAC – 2 Stations

Two types of head attachment including dummy cover and 90° angle (2000r/min) are equipped as a standard feature to minimize the time required to change a head attachment.



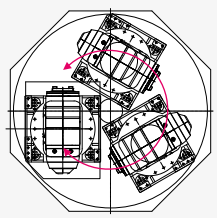


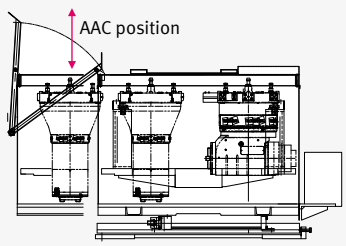


Rotary type AAC – 3 Stations Option

Three head attachments are optionally available. The head attachments are changed using a rotary method, thus minimizing the changing time.



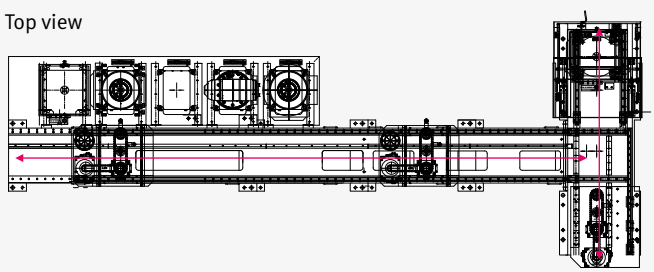


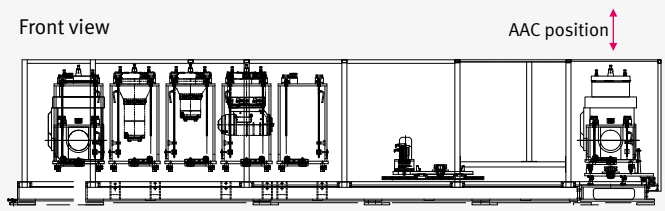


Linear Shuttle type AAC - 3/4/5/7 Stations Option

Optionally 3, 4, 5, or 7 head attachment can be equipped.

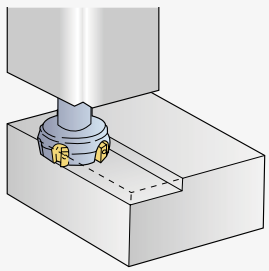






Heavy-duty Cutting Capacity

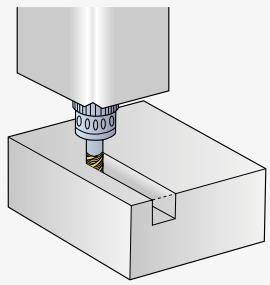
Face mill



Material: SM45C (Carbon steel)

Ram spindle line-up	Cutter Dia.	Cutting Width	Cutting Depth	Spindle Speed	Feedrate	Chip removal rate
Heavy-duty cutting option I	Ø160 mm (6.3 inch)	112 mm (4.4 inch)	7 mm (0.3 inch)	315 r/min	665 mm/min (26.2 ipm)	521 cm^3/min (31.8 $inch^3$/min)
Heavy-duty cutting option II	Ø160 mm (6.3 inch)	140 mm (5.5 inch)	6 mm (0.2 inch)	315 r/min	1080 mm/min (42.5 ipm)	907 cm^3/min (55.3 $inch^3$/min)
Material: GC300 (Cast iron)						
Heavy-duty cutting option I	Ø160 mm (6.3 inch)	112 mm (4.4 inch)	6 mm (0.2 inch)	315 r/min	1188 mm/min (46.8 ipm)	798 cm^3/min (48.7 $inch^3$/min)
Heavy-duty cutting option II	Ø160 mm (6.3 inch)	140 mm (5.5 inch)	8 mm (0.3 inch)	315 r/min	1404 mm/min (55.3 ipm)	1572 cm^3/min (95.9 $inch^3$/min)

End mill



Material: SM45C (Carbon steel)

Cutter Dia.	Cutting Width	Cutting Depth	Spindle Speed	Feedrate	Chip removal rate	Ram spindle expansion
63 mm (2.5 inch)	63 mm (2.5 inch)	31.5 mm (1.2 inch)	495 r/min	312 mm/min (12.3 ipm)	619 cm^3/min (37.8 $inch^3$/min)	325 mm (12.8 inch)
Material: GC300 (Cast iron)						
63 mm (2.5 inch)	63 mm (2.5 inch)	63 mm (2.5 inch)	360 r/min	200 mm/min (7.9 ipm)	794 cm^3/min (48.5 $inch^3$/min)	325 mm (12.8 inch)

* The results, indicated in this catalogue are provides as example. They may not be obtained due to differences in cutting conditions and environmental conditions during measurement.

High-precision Mold Machining





Rail-shape Prastic toy (injection mold)		4-Door Sedan Door Trim (press mold)	
Model	DCM 2740W	**Model**	DCM 3250F
Material	KP4M	**Material**	KP4M
Workpiece size	1000 mm x 700 mm x 400 mm (39.37 inch x 27.56 inch x 15.75 inch)	**Workpiece size**	1500 mm x 1000 mm x 500 mm (59.06 inch x 39.37 inch x 19.69 inch)
Machining time	10H (finishing)	**Machining time**	80H (finishing)

Product Preview

Basic information

Broad Range of Machining Capabilities

High-Precision Mold Machining Performance

Convenient Machining Functions

Machine Information

Standard/Optional Specifications

Machine Specifications

Customer Support



High-Precision Mold Machining

Adoption of the DSQ I/II/III functions, X/Y/Z/W axes linear scale, or X/Y/Z axes ball screw shaft cooling as options enables the machining of high-accuracy molds and general parts.

Optimal Solutions

- **DSQ I/II/III functions**
- **X/Y/Z/W axes linear scale**
- **X/Y/Z axes ball screw shaft cooling**

High-Precision Mold Machining

High-speed, High-precision Contouring Control

- DSQI(AICCII _ 200 Block + Machining condition selection function)
- DSQII(DSQI + Data server [1GB]) Option
- DSQIII(DSQII + High speed processing _ 600 Block) Option

* DSQ : Doosan Super Quality



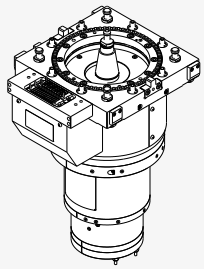
Cutting condition selection function

Cutting condition	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10
Quality	Normal									Excellent
Tool life	Long	←								Normal
Application	High-speed roughing									High-precision finishing

- Use the R code in the program to change the cutting condition by up to 10 steps.
  - Improved productivity (high-speed roughing, high-precision finishing)
- Various servo-related NC parameters such as acceleration and deceleration time constants and maximum cutting feed can be set automatically.

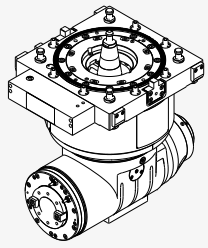
Head Attachments and Universal Head Specialized for Mold Machining

Optimized mold machining can be achieved by selecting various head attachments and ram spindles specialized for diverse mold shapes and high-speed mold machining.



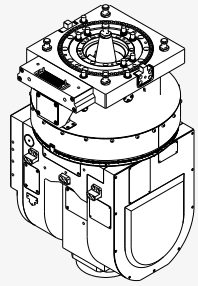
High-speed extension Option

10000r/min, 15kW(20.1Hp)
15000r/min, 15kW(20.1Hp)



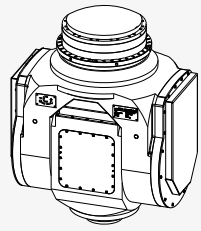
High-speed 90° angle Option

6000r/min, 22kW(29.5Hp),
min 5/2.5/1° indexing



Universal indexing Option

4000r/min, 11kW(14.8Hp),
B/C axes min. 1° indexing



High-speed, high-precision built-in driven 5-axis simultaneous universal head 12000r/min

B axis ±120° min. 0.001° indexing
C axis ±220° min. 0.001° indexing

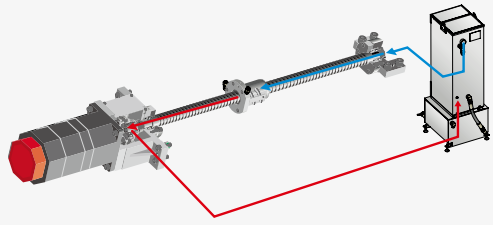
X/Y/Z/W-axis Linear Scale Feedback System Option

The linear scale feedback system provides high positioning accuracy in the X, Y, Z, and W axes.



X/Y/Z-axis Ball Screw Shaft Cooling Option

The heat generated in the ball screw is removed by a high-efficiency cooler to minimize thermal deformation of the ball screw.
For faster removal of frictional heat, a hollow ball screw shaft through which the coolant oil flows is equipped.





Convenient Machining Functions

The DCM series provides a support system for 5 face machining of large and heavy workpieces, easy setup guidance, easy pattern cycles, workload counter control, intelligent machining control and process monitoring system

Optimal Solutions

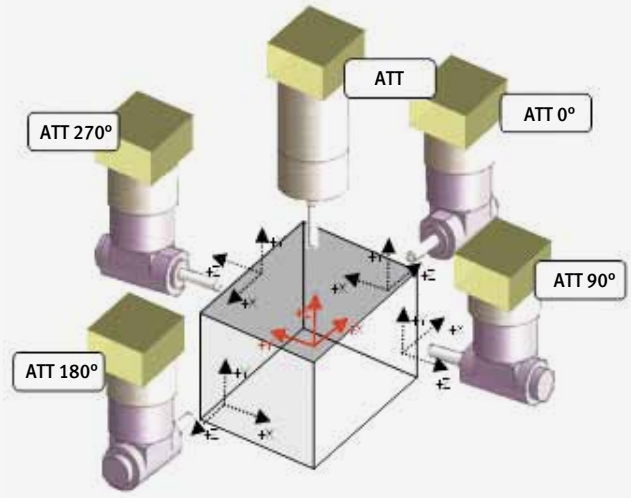
- 5-face machining support system
  Easy setup guidance
- Easy pattern cycle
- Work load counter control
- Intelligent machining control
- Process monitoring function
- Maintenance management function
- Enhanced operator's convenience

5-face machining support system

Supporting functions for 5-face machining

- 3-dimentional-work coordinates conversion system
- Tool end point shift within work coordinate system
- AAC control and head attachment position control by M-Code
- ATC is applicable for various head attachments.

※ These functions are provided as a standard package when the 5 face machining head attachment is supplied.



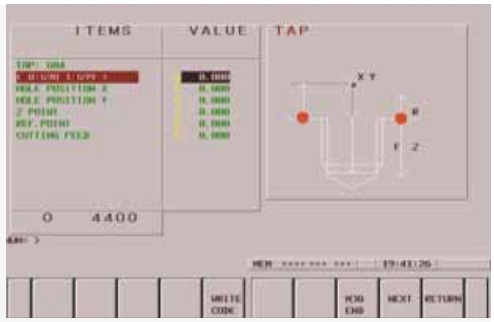
Easy Setup Guidance Option

This function makes it easy to set up the work coordinate system using automatic or semi-automatic measuring probes. In case of automatic probe, by placing the probe close to the setting surface, selecting a shape, and pressing the Cycle Start button, the point is automatically touched and the workpiece coordinate is set up.

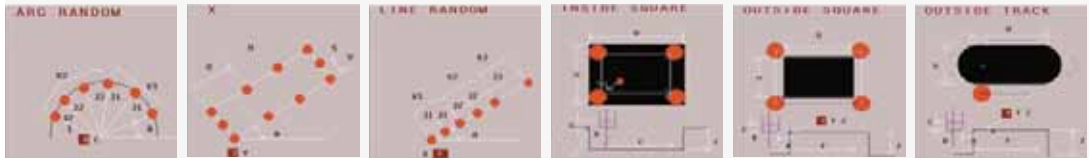


Easy Pattern Cycle

Programming time can be dramatically reduced by creating cutting programs and inputting the major parameters of the cutting pattern cycle required for parts cutting. The function is embedded in the CNC for convenient use in the field. Up to 22 complex pattern cycles including basic 5 patterns are available.

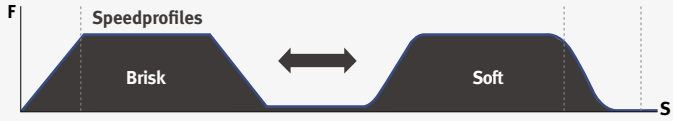


Various types of hole patterns and milling patterns available



Work load counter control

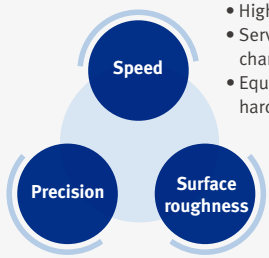
If customer selects proper M-Code according to weight of the work piece, the machine can decide itself the best moving pattern of the table. And machining can progress by this decision.



M-Code	Weight of work piece	DCM 2740	DCM2750	DCM 2760	DCM 3250	DCM 3260
M380 A1	5 tons(11023.0 lb) or less	•	•	•	•	•
M380 A2	10 tons(22045.9 lb) or less	•	•	•	•	•
M380 A3	15 tons(33068.9 lb) or less	•	•	•	•	•
M380 A4	20 tons(44091.8 lb) or less	•	•	•	•	•

Intelligent Machining Control Option

• Offers universal functions applicable from die & mold to industrial parts.



- High speed CPU use
- Servo spindle motor with superb dynamic characteristics
- Equipment structure with outstanding hardness

- High speed servo system
- Variable acceleration control
- Feed forward control

- Powerful block handling capacity
- NANO level control
- CAM S/W linkage capability, NURBS function etc.

Process monitoring function

In-process monitoring minimizes the risk of damage to the workpiece during cutting

Cutting load monitoring function Option

- Automatic tracking of worn-out or broken tools when abnormal load is checked.
- Data storage function for each workpiece.



Tool maintenance function Option

- An alarm sounds when the tool's life reaches its end.
- Tool management by groups and alternative tools usages are possible



CNC System FANUC 31i

Buttons compatible with HEIDENHAIN & SIEMENS NC controller

Buttons are divided into vertically and horizontally by functions.



File management & editing function similar to that of a PC

- Naming of programs with up to 32 characters paging
- Subprograms with file names
- Program management by folder



Maintenance Function

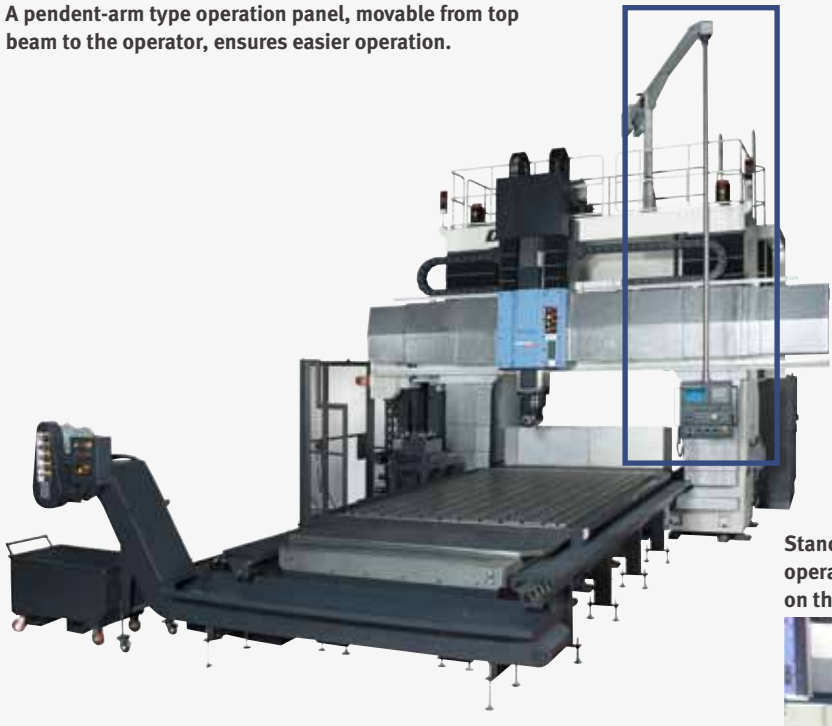
Periodically checking function

Provides notification of checked items including oil filling for equipment maintenance.



Improved Operability

A pendent-arm type operation panel, movable from top beam to the operator, ensures easier operation.



Stand-type pendent arm operation panel installed on the floor Option



Improved user convenience

- Mono lever jog switch is provided at the bottom of the main operation panel for easier long-axis feeding of large machine tools.
  (Button switches Option)
- The pulse handle and manual handle (portable MPG) enabling easy setup of work pieces for the operator's convenience are provided as a standard feature.



Mono lever jog switches



Manual handle Portable MPG



Manual handle Option Portable 3 MPG



Manual handle Option MPG with LCD display



ATC, APC manual control screen

Various Optional Equipment

Various options to satisfy the customers' requirements can be selected and applied.

NO	Division	Description		DCM series
1	Electric cabinet light			○
2	Electric cabinet air conditioner			○
3	High-quality machining (DOOSAN SUPER QUALITY)	DSQ I : AICCII+MACHINING CONDITION SELECTION		●
4		DSQ II : DSQ I+DATA SERVER (1GB)		○
5		DSQ III : DSQ II+HIGH SPEED PROCESSING_600 Block)		○
6	Tool management			○
7	Tool shank	BT50		●
8		CAT50		○
9		DIN50		○
10		HSK 63A		○
11	Tool magazine	40 tools		●
12		60 tools		○
13		90 tools		○
14		120 tools		○
15	Work load counter control			●
16	Electric leakage breaker			○
17	Electric line filter			○
18	Ram spindle	6000 r/min (Built-in)	25/22 kW (33.5 / 29.5 Hp)(FANUC)	●
19		12000 r/min (Built-in)	30/25 kW(40.2 / 33.5 Hp) (FANUC)	○
20		6000 r/min (Gear box)	22/18.5 kW(29.5 / 24.8 Hp) (FANUC)	○
21		4000 r/min (Gear box)	26/22 kW(34.9 / 29.5 Hp) (FANUC)	○
22		4000 r/min (Gear box W/ HIGH TORQUE)	37/30 kW(49.6 / 40.2 Hp) (FANUC)	○
23		Spindle lubrication device		●
24		Step Cooling System		●
25	Linear scale feedback system	X-axis		○
26		Y-axis		○
27		Z-axis		○
28		W-axis		○
29	Lift-up chip conveyor	HINGED PLATE		○
30		MAGNETIC SCRAPER		○
31	Components for installation	Leveling blocks and anchoring bolts		●
32	Safety ladder and top beam fence			●
33	Hydraulic power unit			●
34	Bellows cover for axis	W-axis		●
35	Sliding covers for axes	X/Y/Z axes		●
36	Easy pattern cycle			●
37	Automatic tool length measurement	TS27R_RENISHAW		○
38		NC4_RENISHAW		○
39	Automatic workpiece measurement	OMP60_RENISHAW		○
40		RMP60_RENISHAW		○
41	Master tool for automatic tool length measurement	CALIBRATION BLOCK		○
42	Automatic attachment changer (AAC)	LINEAR TYPE (2-ST)		●
43		ROTARY TYPE (3-ST)		○
44		LINEAR SHUTTLE (3-ST)		○
45		LINEAR SHUTTLE (4-ST)		○
46		LINEAR SHUTTLE (5-ST)		○
47		LINEAR SHUTTLE (7-ST)		○

● Standard ○ Optional X Not applicable

NO	Division	Description	DCM series
47	Auto power on		○
48	Auto power off		●
49	Automatic Pallet Changer (APC)	SIDE SHUTTLE (2-PALLET)	○
50	Work light	Fluorescent lamps: 2EA	●
51	Operator call lamp (Red/Yellow/Green)		●
52	Tool load monitoring		○
53	Coolant tank	500L(132.1 galon)	●
54		1000L(264.2 galon)	○
55	Periodical checking function		●
56	Main operation panel (pendent type)	Up/down pendent	●
57		POLE TYPE	○
58		GANTRY TYPE	○
59	Max. tool weight	25KG(55.1 lb)	●
60		30KG(66.1 lb)	○
61	Max. tool length	400mm(15.7 inch)	●
62		600mm(23.6 inch)	○
63	Chip & coolant protective cover	Rear chip protective cover	●
64		CHIP COVER	○
65		SEMI GUARD	○
66		FULL GUARD	○
67	Coolant	FLOOD 2.2 kW (2.95 Hp)	●
68		FLUSHING	○
69		SHOWER	○
70		Coolant gun	○
71	Test bar	BT50	○
72	Table T-slot	$24H_8$ ($0.94H_8$)	●
73		$28H_8$ ($1.10H_8$)	○
74		$32H_8$ ($1.26H_8$)	○
75	Chip bucket	Rotary type (380L) (100.4 galon)	○
76		Lift type (380L) (100.4 galon)	○
77	High column	+350mm (13.8 inch)	○
78		+700mm (27.6 inch)	○
79		+1050mm (41.3 inch)	○
80		+1400mm (55.1 inch)	○
81		+1750mm (68.9 inch)	○
82	W-axis balancing system		●
83	Air	AIR BLOWER	●
84		AIR PURGE	●
85		AIR CURTAIN	●
86		AIR GUN	○
87		AIR DRYER	○

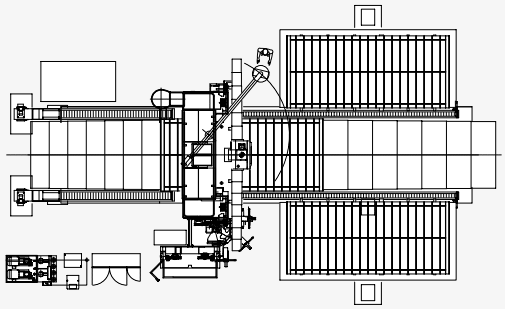
NO	Division	Description	DCM series
88	C-axis control BZ sensor		●
89	Display unit	10.4" COLOR LCD	●
90		15" COLOR LCD	○
91	F frame head attachment	DUMMY HEAD	●
92		EXTENSION HEAD (L400/4K R/MIN)	○
93		EXTENSION HEAD (L400/6K R/MIN)	○
94		EXTENSION HEAD (L600/6K R/MIN)	○
95		EXTENSION HEAD (L600/10K R/MIN)	○
96		EXTENSION HEAD (L600/15K R/MIN)	○
97		90D ANGLE HEAD (L350/2K R/MIN)	●
98		90D ANGLE HEAD (L350/2K R/MIN W/TSC)	○
99		90D ANGLE HEAD (L350/4K R/MIN)	○
100		90D ANGLE HEAD (L350/4K R/MIN W/TSC)	○
101		90D ANGLE HEAD (L350/6K R/MIN)	○
102		90D ANGLE HEAD (L350/6K R/MIN W/TSC)	○
103		UNIVERSAL INDEXING HEAD(L835/2K R/MIN)	○
104		UNIVERSAL INDEXING HEAD(L835/4K R/MIN)	○
105	F frame 90° head attachment indexing angle	5˚	●
106		2.5˚	○
107		1˚	○
108	MPG	PORTABLE 1-MPG	●
109		STAND TYPE 3-MPG	○
		MPG WITH LCD DISPLAY	○
110		PORTABLE TYPE 3-MPG	○
111	NC Controller	FANUC 31i-B	●
112		HEIDENHAIN iTNC530	○
113		SIEMENS 840D	○
114	Oil skimmer	BELT TYPE	○
115	Pull stud	MAS 403 P50T-1 (45˚)	●
116		MAS 403 P50T-2 (60˚)	○
117	Spot light on ram spindle		○
118	TSC	NONE	●
119		1.5 kW(2.0 Hp)_2.0 MPa(290.0 psi)	○
120	U frame universal head	UNIVERSAL CONTOURING HEAD (3K R/MIN)	○
121		UNIVERSAL CONTOURING HEAD (12K R/MIN)	○
122		UNIVERSAL CONTOURING HEAD (H/T, 12K R/MIN)	○
123	W-axis cutting feedrate		○
124	2-side chip conveyor (in machine to tank)	HINGED PLATE	○
125		MAGNETIC SCRAPER	○
126	3-dimensional coordinate system conversion		●
127	5-face machining support system		●
128	Additional 5th axis	PACKAGE #1 : ONLY WIRING	○
129		PACKAGE #2 : HYD. & CONTROL READY	○
130		PACKAGE #3 : FULL OPT.	○

※ Specifications should be reviewed in detail before contract.

Automatic Pallet Changer (APC, Option)



Faster shipment thanks to standardized modular design

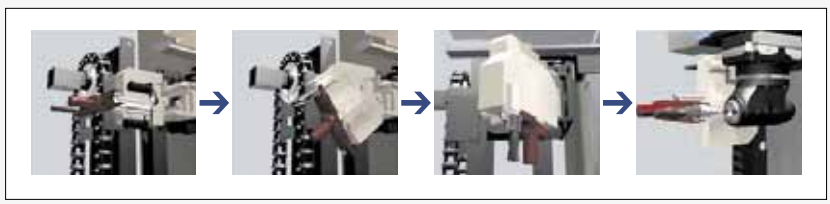


Automatic Tool Changer (ATC)

One arm performs the changes for both the horizontal and vertical spindle. The next tool to be used, regardless of the spindle location, is brought to the standby position during cutting. The most reliable ATC and magazine with its servo motor minimize downtime.



Horizontal ATC operation with a 90° head attach mounted.





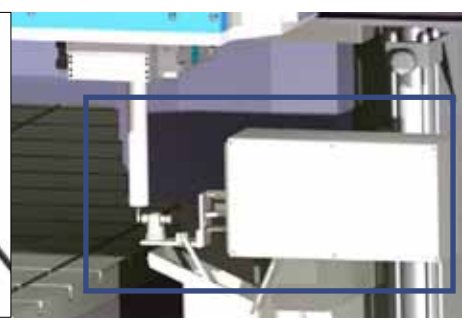
※ Picture-Vertical ATC in operation

Max. No. of tools	40 [Option 60, 90, 120] EA
Max. tool diameter	130 [near pot empty: 250] mm (5.1 [near pot empty: 9.8] inch)
Max. tool length	400mm (15.7 inch)
Max. tool weight	25 [Option 30] kg (55.1 [Option 66.1] lb)
Tool selection type	Fixed address
Tool changing time (T-T)	5.5 s

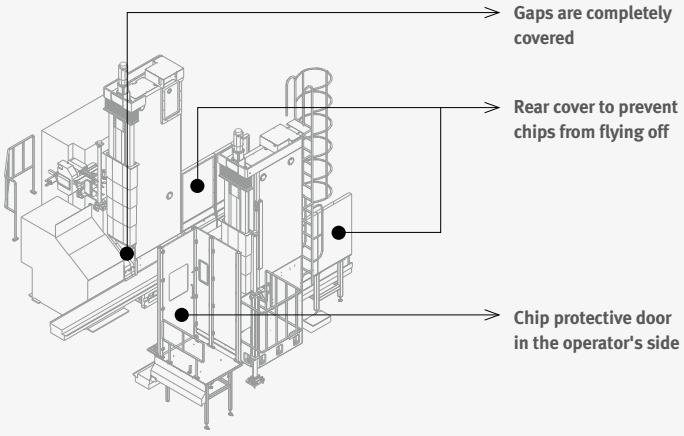
Automatic Tool Length Measurement Option

Tool length can be measured in the vertical and horizontal directions. The length of tool set up on the spindle is measured automatically, and the tool offset data of the tool number are entered automatically.





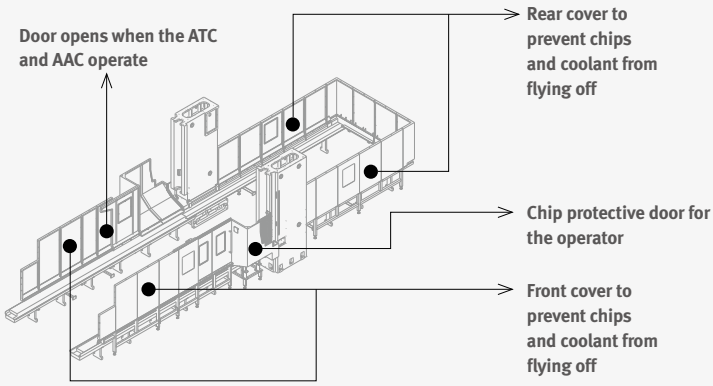
Chip Cover Option





Semi-guard Option

The semi-guard covers the entire cutting area to prevent chips and coolant from flying off during cutting operation.





Chip Conveyor

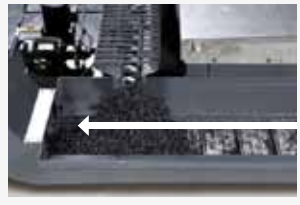
Optional chip conveyors are available to discharge chips and improved to prevent chips and coolant from falling on the floor.



Both sides of the table
Coil conveyor (DCM 2740 / standard)



Both sides of the table
- chip conveyors
(Over DCM 2750 / Option)



Lift-up chip conveyor Option

※ The hinged-plate chip conveyor and the magnetic scraper chip conveyor are optional features.

Chip Bucket Option

Forklift type

The bottom of the chip bucket has a space into which forks can be inserted to allow transportation by a forklift .

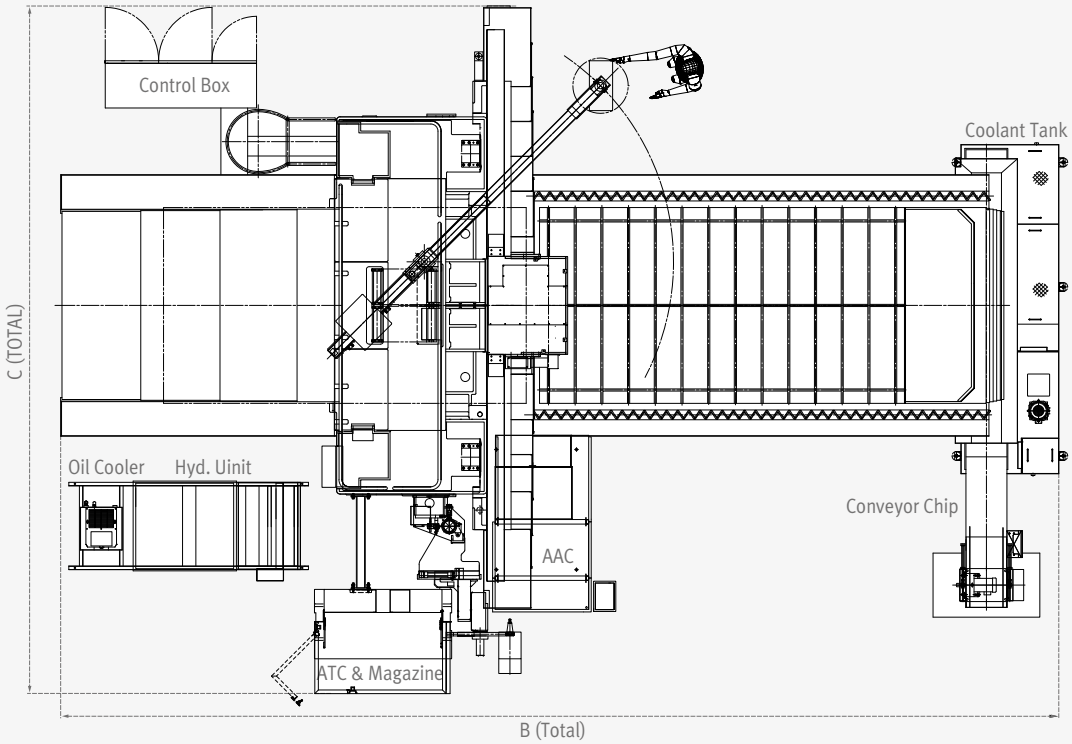
Rotation type

The chip bucket is fitted with a rotating joint for tilting and emptying the bucket.

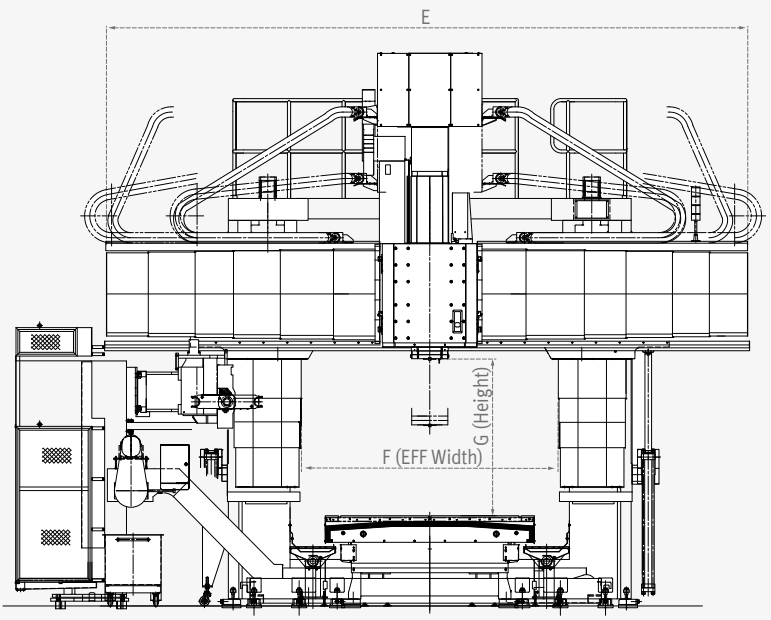


External Dimensions

Top View

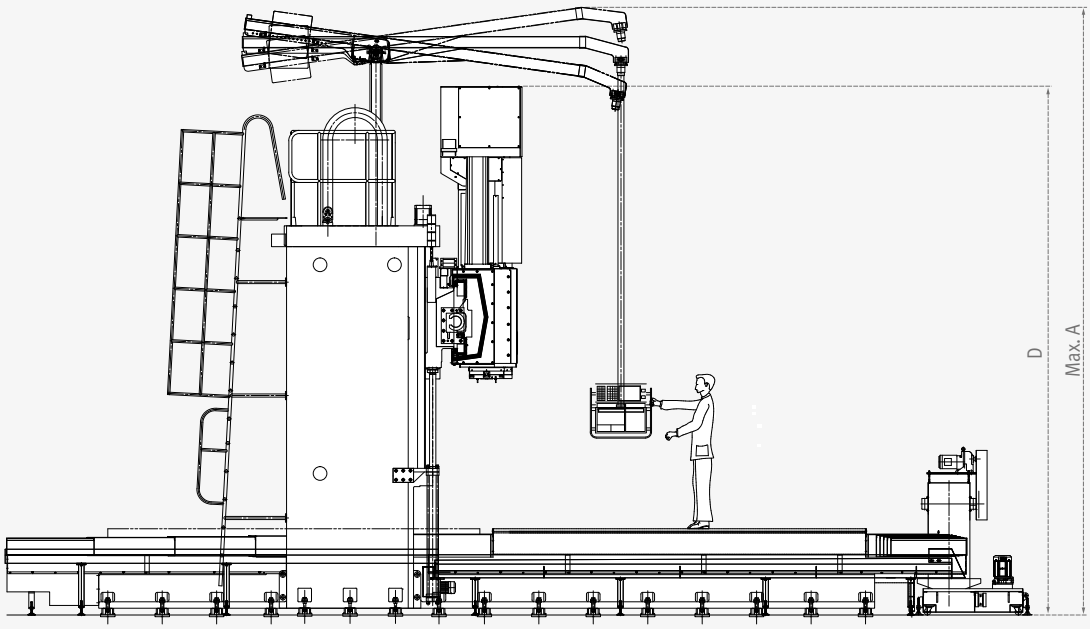


Front View



Unit: mm (inch)

Side View



Model	A	B	C	D	E	F	G
DCM 2740	6700(263.8)	11200(440.9)	7730(304.3)	5830(229.5)	6750(265.7)	2700(106.3)	1650 [2000 /2350](65.0 [78.7 / 92.5])
DCM 2750	6700(263.8)	13375(526.6)	7730(304.3)	5830(229.5)	6750(265.7)	2700(106.3)	1650 [2000 /2350](65.0 [78.7 / 92.5])
DCM 2760	6700(263.8)	15710(618.5)	7730(304.3)	5830(229.5)	6750(265.7)	2700(106.3)	1650 [2000 /2350](65.0 [78.7 / 92.5])
DCM 2780	6700(263.8)	19710(776.0)	7730(304.3)	5830(229.5)	6750(265.7)	2700(106.3)	1650 [2000 /2350](65.0 [78.7 / 92.5])
DCM 3250	6700(263.8)	13375(526.6)	8230(324.0)	5830(229.5)	7250(285.4)	3200(126.0)	1650 [2000 /2350](65.0 [78.7 / 92.5])
DCM 3260	6700(263.8)	15710(618.5)	8230(324.0)	5830(229.5)	7250(285.4)	3200(126.0)	1650 [2000 /2350](65.0 [78.7 / 92.5])
DCM 3280	6700(263.8)	19710(776.0)	8230(324.0)	5830(229.5)	7250(285.4)	3200(126.0)	1650 [2000 /2350](65.0 [78.7 / 92.5])
DCM 3780	6700(263.8)	19710(776.0)	8230(324.0)	5830(229.5)	7750(305.1)	3700(145.7)	1650 [2000 /2350](65.0 [78.7 / 92.5])
DCM 37100	6700(263.8)	24380(959.8)	8230(324.0)	5830(229.5)	7750(305.1)	3700(145.7)	1650 [2000 /2350](65.0 [78.7 / 92.5])

※ The dimensions above are the standard type for each model.

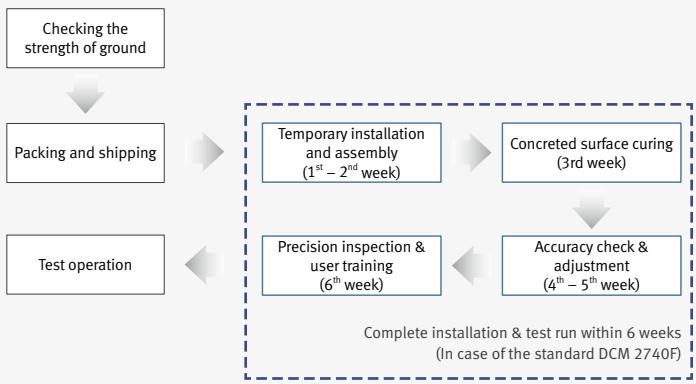
Installation precautions

1. Test for bearing capacity of soil should be taken more than four areas.(In particular, places for bed and column where the loads are concentrated must be tested.)
2. Basically, the bearing capacity of soil should exceed the values determined by Doosan. (Test for bearing capacity of soil should follow Doosan's standards.)
3. Our engineering team may be available even during the foundation work at customer's request.

Installation & test run

On-site installation and commissioning will be conducted according to a '5-week' schedule. [Excluding the concreted surface curing period (3rd week)]

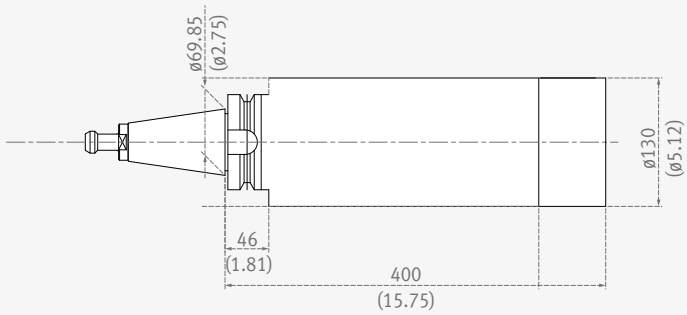
※ The installation plan may vary according to the size of the machine, optional devices, and the conditions and environment of the site.



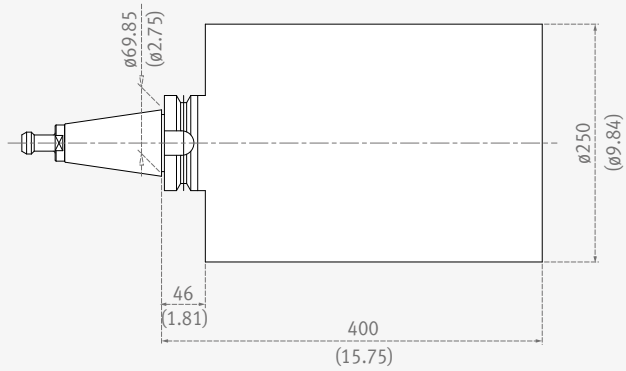
Tool Dimensions

Unit: mm (inch)

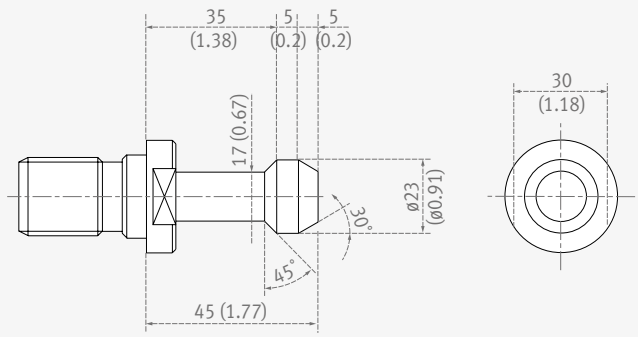
With an adjacent tool



Without adjacent tools



Pull Stud : MAS 403 P50T-1 (45°)



Maximum tool weight

- Standard: 25 kg × 120 mm
- The center of gravity must be within 120 mm from the gauge line.

※ Applicable up to 30 kg with optional specification

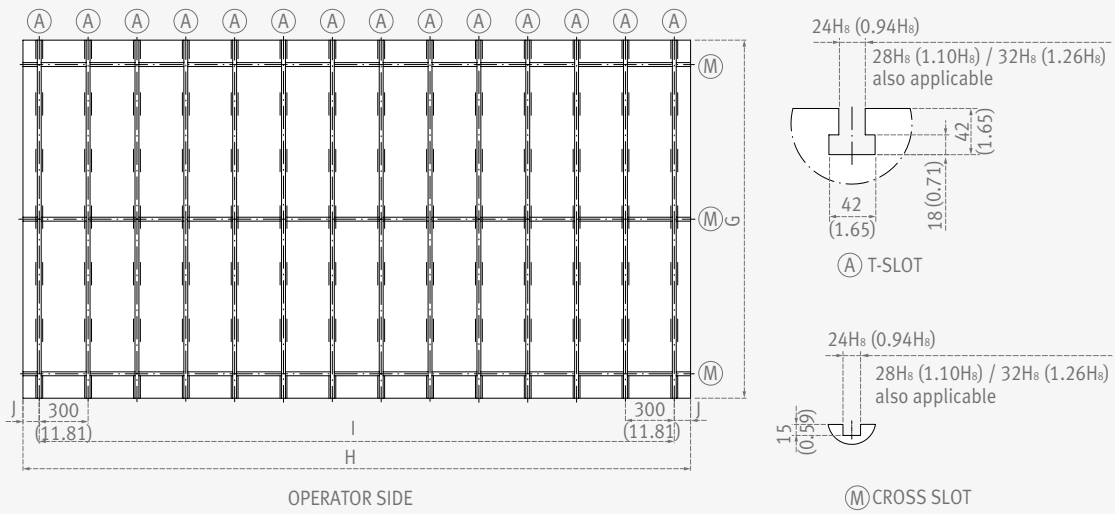
Various tooling applications

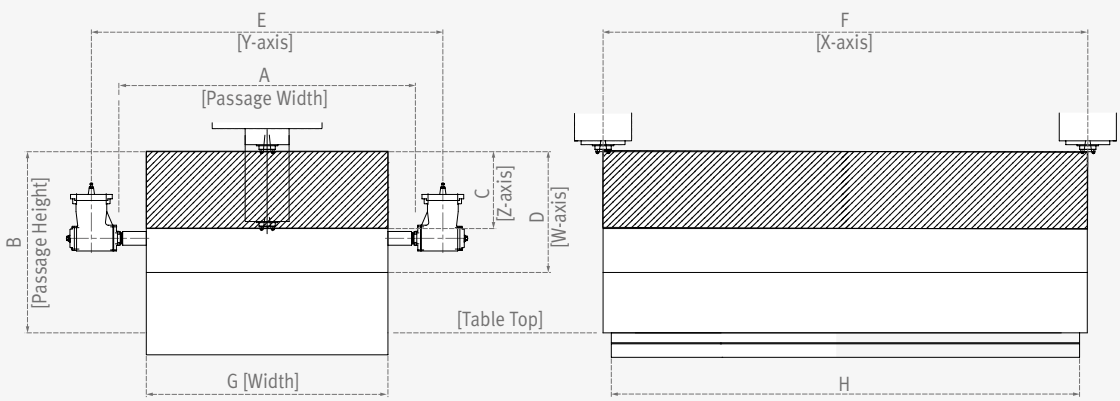
- Any type of tooling is applicable.
- Please contact our engineering team if necessary



Work Area and Table Dimensions

Unit: mm (inch)





Model	Table type	A	B	C	D	E	F	G	H	I	J
DCM 2740	22 x 41 (0.9 x 1.6)	2700 (106.3)	1650 (65.0)	700 (27.6)	1100 (43.3)	3200 (126.0)	4250 (167.3)	2200 (86.6)	4100 (161.4)	3900 (153.5)	100 (3.9)
DCM 2750	22 x 51 (0.9 x 2.0)	2700 (106.3)	1650 (65.0)	700 (27.6)	1100 (43.3)	3200 (126.0)	5250 (206.7)	2200 (86.6)	5100 (200.8)	4800 (189.0)	150 (5.9)
DCM 2760	22 x 61 (0.9 x 2.4)	2700 (106.3)	1650 (65.0)	700 (27.6)	1100 (43.3)	3200 (126.0)	6250 (246.1)	2200 (86.6)	6100 (240.2)	5700 (224.4)	200 (7.9)
DCM 2780	22 x 81 (0.9 x 3.2)	2700 (106.3)	1650 (65.0)	700 (27.6)	1100 (43.3)	3200 (126.0)	8250 (324.8)	2200 (86.6)	8100 (318.9)	7800 (307.1)	150 (5.9)
DCM 3250	27 x 51 (1.1 x 2.0)	3200 (126.0)	1650 (65.0)	700 (27.6)	1100 (43.3)	3700 (145.7)	5250 (206.7)	2700 (106.3)	5100 (200.8)	4800 (189.0)	150(5.9)
DCM 3260	27 x 61 (1.1 x 2.4)	3200 (126.0)	1650 (65.0)	700 (27.6)	1100 (43.3)	3700 (145.7)	6250 (246.1)	2700 (106.3)	6100 (240.2)	5700 (224.4)	200 (7.9)
DCM 3280	27 x 81 (1.1 x 3.2)	3200 (126.0)	1650 (65.0)	700 (27.6)	1100 (43.3)	3700 (145.7)	8250 (324.8)	2700 (106.3)	8100 (318.9)	7800 (307.1)	150 (5.9)
DCM 3780	32 x 81 (1.3 x 3.2)	3700 (145.7)	1650 (65.0)	700 (27.6)	1100 (43.3)	4200 (165.4)	8250 (324.8)	3200 (126.0)	8100 (318.9)	7800 (307.1)	150 (5.9)
DCM 37100	32 x 101 (1.3 x 4.0)	3700 (145.7)	1650 (65.0)	700 (27.6)	1100 (43.3)	4200 (165.4)	10250 (403.5)	3200 (126.0)	10100 (397.6)	9900 (389.8)	100 (3.9)

Machine Specifications

Item		Unit	DCM 2740	DCM 2750	DCM 2760	DCM 2780	DCM 3250	DCM 3260	DCM3280	DCM 3780	DCM37100
Travel	X-axis Travel (Table Longitudinal)	mm (inch)	4250(167.3)	5250(206.7)	6250(246.1)	8250(324.8)	5250(206.7)	6250(246.1)	8250(324.8)	8250(324.8)	10250(403.5)
	Y-axis Travel (Spindle Head Cross)	mm (inch)	3200(126.0)				3700(145.7)			4200(165.4)	
	Z-axis Travel (Ram Vertical)	mm (inch)	700 {1000}(27.6{39.4})								
	W-axis Travel (Vertical Movement of Crossrail)	mm (inch)	1100 {1400}(43.3{55.1})								
	Effective width between columns	mm (inch)	2700(106.3)				3200(126.0)			3700(145.7)	
	Table to Spindle Nose	mm (inch)	1650 {2000, 2350, 2700}(65.0{78.7, 92.5, 106.3)								
Feedrate	Rapid Traverse X, Y, Z, W	m/min (ipm)	16, 16, 10, 3 (629.9, 629.9, 393.7, 118.1)								
	Max. Cutting Feedrate X, Y, Z	mm/min (ipm)	10000, 10000, 10000 (393.7, 393.7, 10000)								
Table	Table Size (Width x Length)	mm (inch)	2200 x 4100 (86.6 x 161.4)	2200 x 5100 (86.6 x 200.8)	2200 x 6100 (86.6 x 240.2)	2200 x 8100 (86.6 x 318.9)	2700 x 5100 (106.3 x 200.8)	2700 x 6100 (106.3 x 240.2)	2700 x 8100 (106.3 x 318.9)	3200 x 8100 (126.0 x 318.9)	3200 x 10100 (126.0 x 397.6)
	Load Capacity	kg (lb)	18000 (39682.6)	20000 (44091.8)	28000 (61728.5)	36000 (79365.2)	30000 (66137.7)	36000 (79365.2)	40000(88183.6)		
	T-Slot x Numbers	mm (inch)	24H8 {28H8, 32H8} x 13 (0.9H0.3{1.1H0, 1.3H0.3 x 0.5								
Spindle Head	Tool Shank	-	BT 50								
	Ram Size	mm (inch)	380 x 380(15.0 x 15.0)								
	Number of Speed Ranges	step	2								
	Max. Spindle Speed	r/min	Built-in 6000, {Built-in 12000, Gear box 4000, 6000}								
	Spindle Drive Motor (30min. / cont.)	kW (Hp)	25/22 {Built-in 30/25, Gear box 22/18.5, 26/22, 37/30} (33.5/29.5 {Built-in 40.2/33.5, Gear box 29.5/24.8, 34.9/29.5, 49.6/40.2})								
ATC	Tool Storage Capacity	ea	40 {60, 90, 120}								
	Max.Tool Diameter	mm (inch)	130 [adjacent pot empty: 250](5.1[adjacent pot empty: 9.8])								
	Max.Tool Length	mm (inch)	400(15.7)								
	Max.Tool Weight	kg (lb)	25 {30}(55.1 {66.1})								
	Tool Selection Type		Fixed address								
AAC	Type		Linear type 2-station {Rotary type 3-station, Linear shuttle type 3/4/5/7 stations}								
	Max. Head Attachment Weight	kg (lb)	500(1102.3)								
Machine Size	Machine Height	mm (inch)	6700								
	Floor Space (Machine only)	mm (inch)	7730 x 11200 (304.3 x 440.9)	7730 x 13375 (304.3 x 526.6)	7730 x 15710 (304.3 x 618.5)	7730 x 19710 (304.3 x 776.0)	8230 x 13375 (324.0 x 526.6)	8230 x 15710 (324.0 x 618.5)	8230 x 19710 (324.0 x 776.0)	8730 x 19710 (343.7 x 776.0)	8730 x 959.8 (343.7 x 776.0)
	Machine Weight	kg (lb)	65000 (143298.4)	68000 (149912.1)	71000 (156525.9)	77000 (169753.4)	82000 (180776.4)	86000 (189594.7)	94000 (207231.5)	112000 (246914.1)	120000 (264550.8)

{} : optional

NC Unit Specifications

● Standard ○ Optional X N/A

FANUC 31i

- Axes control
- Interpolation & feed function
- Spindle & M-code function
- Tool function
- Programming and editing function
- Others (operation, setting & display, etc)
- Frame reference function

Classification	Item	Spec.	FANUC 31i
Axes control	Controlled axes	4 (X,Y,Z,W)	●
	Additional controlled axes	6 axes in total	○
	Simultaneously controlled axes	Positioning(G00)/Linear interpolation(G01) : 3 axes Circular interpolation(G02, G03) : 2 axes	●
	Backlash compensation		●
	Emergency stop / overtravel		●
	HRV control		●
	Least command increment	0.001 mm / 0.0001"	●
	Least input increment	0.001 mm / 0.0001"	●
	Machine lock	all axes / Z-W axis	●
	Mirror image	Reverse axis movement (setting screen and M - function)	●
	Stored pitch error compensation	Pitch error offset compensation for each axis	●
	Interpolation type pitch error compensation		○
	Stored stroke check1	Overtraval controlled by software	●
	Absolute pulse coder		●
	Position switch		●
Interpolation & feed function	2nd reference point return	G30	●
	3rd/4th reference return	G30P3/P4	●
	Circular interpolation	G02, G03	●
	Cylinderical interpolation	G07.1	○
	Linear interpolation	G01	●
	Helical interpolation		●
	Bell-type acceleration/deceleration before look ahead interpolation		○
	Polar coordinate interpolation	G12.1 / G13.1	○
	Exponential interpolation		○
	Involute interpolation		○

● Standard ○ Optional X N/A

Classification	Item	Spec.	FANUC 31i
Interpolation & feed function	Smooth backlash compensation		●
	Dwell	G04	●
	Exact stop check	G09, G61 (mode)	●
	Feed per minute	mm / min	●
	Feedrate override	0 - 200 % (10% unit)	●
	Jog override	0 - 5000mm/min	●
	Automatic corner override	G62	○
	Automatic corner deceleration		●
	Cutting feedrate clamp		●
	Rapid traverse bell-shaped acceleration/ deceleration		●
	3-dimensional manual feed		●
	Manual handle feed	1 unit	●
	Manual handle feed 2/3 unit	Max. 3unit	○
	Manual handle feed rate	x1, x10, x100 (per pulse)	●
	Manual handle interruption		○
	Manual handle retrace		○
	Override cancel	M48 / M49	●
	Positioning	G00	●
	Rapid traverse override	F0 (fine feed), 25 / 50 / 100 %	●
	Reference point return	G27, G28, G29	●
	Skip function	G31	●
	AICC II	200 BLOCK	●
	High-speed processing	600 BLOCK	○
	Look-ahead blocks expansion	1000 BLOCK	○
	DSQ I	AICC II (200block) + Machining condition selection function	●
	DSQ II	AICC II (200block) + Machining condition selection function + Data server(1GB)	○
	DSQ III	AICC II with high speed processing (600block) + Machining condition selection function + Data server(1GB)	○
Spindle & M-code function	M- code function		●
	Spindle orientation	M 3 digits	●
	Spindle speed command	S5 digits	●
	Spindle speed override	10 - 150 (10% increments)	●
	Retraction for rigid tapping		●
	Rigid tapping	G84, G74	●
Tool function	Tool nose radius compensation (Cutter compensation C)	G40, G41, G42	●
	Number of tool offsets	200 ea	●
	Number of tool offsets	400 ea	○
	Number of tool offsets	499 / 999 / 2000 ea	○
	Tool length compensation	G43, G44, G49	●
	Tool life management		●
	Addition of tool pairs for tool life management		○
	Tool number command	T3 digits	●
	Tool offset memory C	Geometry / Wear and Length / Radius offset memory	●
	Tool offset	G45 - G48	○
Programming and editing function	Absolute / Incremental programming	G90 / G91	●
	Automatic Coordinate system setting		●
	Background editing		●
	Canned cycle	G73, G74, G76, G80 - G89, G99	●
	Circular interpolation by radius programming		●
	Custom macro		●
	Addition of custom macro common variables	#100 - #199, #500 - #999	●
	Macro executor		●
	Decimal point input		●
	Extended part program editing		●
	Part program storage	1MB(2,560m)	●
	Part program storage	2MB(5,120m)	○
	Part program storage	4MB(1,0240m)	○
	Part program storage	8MB(2,0480m)	○
	Inch/metric conversion	G20 / G21	●
	Label skip		●
	Maximum commandable value	±99999.999mm (±9999.9999 inch)	●
	No. of Registered programs	1000 ea	●
	No. of Registered programs	4000 ea	○
	Optional block skip	9 BLOCK	○
	Optional stop	M01	●
	Program file name	32 characters	●

Classification	Item	Spec.	FANUC 31i
Programming and editing function	Program number	O4-digits	●
	Sequence number	N 8-digit	●
	Playback function		○
	Program protect		●
	Program stop / end	M00 / M02, M30	●
	Programmable data input	Tool offset and work offset are entered by G10, G11	●
	Sub program	Up to 10 nesting	●
	Tape code	ISO / EIA Automatic discrimination	●
	Thread cutting		●
	Program restart		●
	Workpiece coordinate system	G52 - G59	●
	Addition of workpiece coordinate system	G54.1 P1 - 48 (48 pairs)	●
	Addition of workpiece coordinate system	G54.1 P1 - 300 (300 pairs)	○
	Coordinate system rotation G68, G69		●
	Extended part program editing		●
	Optional angle chamfering . Corner R		●
Others (Operation, setting & Display, etc)	Alarm display		●
	Alarm history display		●
	Actual cutting speed display		●
	Clock function		●
	Coordinate system rotation	G68,G69	●
	Cycle start / Feed hold		●
	Display of PMC alarm message	Message display when PMC alarm occurred	●
	Dry run		●
	Embeded Ethernet		●
	Graphic display	Tool path drawing	●
	Help function		●
	Loadmeter display		●
	MDI / DISPLAY unit	10.4" Color LCD, Keyboard for data input, soft-keys	●
	Memory card interface		●
	I/O interface	RS - 232C	●
	USB memory interface	Only Data Read & Write	●
	Operation functions	Tape / Memory / MDI / Manual	●
	Operation history display		●
	DNC operation with memory card		●
	Optional angle chamfering / corner R		●
	Run hour and part number display		●
	Search function	Sequence NO. / Program NO.	●
	Self - diagnostic function		●
	Servo setting screen		●
	Single block		●
	External data input		●
	Stored stroke check 2		●
	Multi language display		●
	3-dimensional coordinate system conversion	G68	●
	Cs contouring control		●
	Reader/Puncher interface (for 2ch)	Note1)	○
	Multi spindle control	Note2)	○
	Extended Spindle orientation	Note2)	○
	Extended spindle output switching function	Note2)	○
	Chopping function	G81.1	○
	High speed skip function		○
	Polar coordinate command	G15 / G16	○
	Programmable mirror image	G50.1 / G51.1	○
	Scaling	G50, G51	○
	Single direction positioning	G60	○
	Fast Data server with1GB PCMCIA card		○
	Fast Ethernet		○
	3-dimensional tool compensation		○
	Tape format for FS15		○
	Figure copying	G72.1, G72.2	○
	Machining time stamp function		○
	EZ Guide I with 10.4" Color TFT	- Doosan infracore Conversational Programming Solution - When the EZ Guide i is used, the Dynamic graphic display cannot application	○
	Dynamic graphic display (with 10.4" Color TFT LCD)	- Machining profile drawing. - When the EZ Guide i is used, the Dynamic graphic display cannot application	○
	Nano smoothing		○
	3D Manual handle interruption		○

Responding to Customers Anytime, Anywhere



Global Service Support Network

Corporations	Dealer Networks	Technical Centers	Factories
5	128	21	3

Technical Center: Sales Support, Service Support, Parts Support

Doosan Machine Tools' Global Network, Responding to Customer's Needs nearby, Anytime, Anywhere

Doosan machine tools provides a system-based professional support service before and after the machine tool sale by responding quickly and efficiently to customers' demands.
By supplying spare parts, product training, field service and technical support, we can provide top class support to our customers around the world.



Domestic Service Support Network

Integrated Support Centers	Sales Branch Offices	Post-Sales Service Centers	Designated Repair Service Centers
2	7	6	31

Customer Support Service

We help customers to achieve success by providing a variety of professional services from pre-sales consultancy to post-sales support.

Supplying Parts

- Supplying a wide range of original Doosan spare parts
- Parts repair service

Field Services

- On site service
- Machine installation and testing
- Scheduled preventive maintenance
- Machine repair

Technical Support

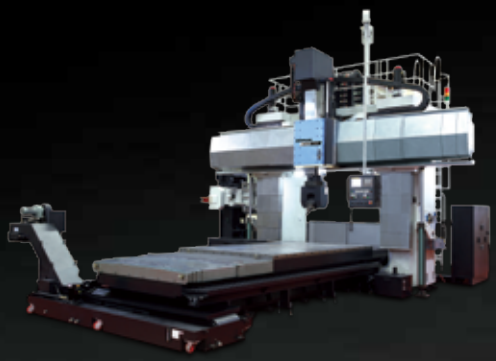
- Supports machining methods and technology
- Responds to technical queries
- Provides technical consultancy

Training

- Programming / machine setup and operation
- Electrical and mechanical maintenance
- Applications engineering

Product Specifications

DCM series



Description	Effective width between columns mm (inch)	Table size mm (inch)	X/Y/Z/W axes travel mm (inch)	Spindle speed (r/min)
DCM 2740	2700(106.3)	2200 x 4100 (86.6 x 161.4)	4250 / 3200 / 700 / 1100 (167.3 / 126.0 / 27.6 / 43.3)	[Standard/high-speed built-in spindle] Standard 6000 High-speed 12000 Option [Heavy-duty gear-driven spindle] Heavy-duty I 6000 Option Heavy-duty II 4000 Option Heavy-duty III 4000 Option
DCM 2750		2200 x 5100 (86.6 x 200.8)	5250 / 3200 / 700 / 1100 (206.7 / 126.0 / 27.6 / 43.3)	
DCM 2760		2200 x 6100 (86.6 x 240.2)	6250 / 3200 / 700 / 1100 (246.1 / 126.0 / 27.6 / 43.3)	
DCM 2780		2200 x 8100 (86.6 x 318.9)	8250 / 3200 / 700 / 1100 (324.8 / 126.0 / 27.6 / 43.3)	
DCM 3250	3200(126.0)	2700 x 5100 (106.3 x 200.8)	5250 / 3700 / 700 / 1100 (206.7 / 126.0 / 27.6 / 43.3)	
DCM 3260		2700 x 6100 (106.3 x 240.2)	6250 / 3700 / 700 / 1100 (246.1 / 126.0 / 27.6 / 43.3)	
DCM 3280		2700 x 8100 (106.3 x 318.9)	8250 / 3700 / 700 / 1100 (324.8 / 126.0 / 27.6 / 43.3)	
DCM 3780	3700(145.7)	3200 x 8100 (126.0 x 318.9)	8250 / 4200 / 700 / 1100 (324.8 / 165.4 / 27.6 / 43.3)	
DCM 37100		3200 x 10100 (126.0 x 397.6)	10250 / 4200 / 700 / 1100 (403.5 / 165.4 / 27.6 / 43.3)	

Doosan Machine Tools

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* The specifications and information above-mentioned may be changed without prior notice.